IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Arnthor Aearsson, Viggó T. Marteinsson, Gudmundur O. Hreggvidsson,

Jakob K. Kristjánsson and Olafur H. Fridjonsson

Continuation-in-part application of and claims priority to Iceland Application No. 5863, filed February 23, 2001

Title:

METHOD OF OBTAINING PROTEIN DIVERSITY

Date: June 11, 2001

EXPRESS MAIL LABEL NO. EL 552572 594 US

INFORMATION DISCLOSURE STATEMENT

	ant Commissioner for Patents
Washi	ington, D.C. 20231
Sir:	
This I	nformation Disclosure Statement is submitted:
[]	under 37 CFR 1.129(a), or (First/Second submission after Final Rejection)
[X]	under 37 CFR 1.97(b), or (Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
[]	under 37 CFR 1.97(c) together with either:
	[] a Statement under 37 CFR 1.97(e), as checked below, or
	[] a \$180.00 fee under 37 CFR 1.17(p), or (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
[]	under 37 CFR 1.97(d) together with:
	[] a Statement under 37 CFR 1.97(e), as checked below, and
	[] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
[]	under 37 CFR 1.97(i): Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper. (Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

	Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or							
[]	No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contains in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.							
Staten	nent Un	der 37 CFR 1.704(d) (Patent Term Adjustment) Applies to original applications (other than design) filed on or after May 29, 2000						
[]	comm was no	tem of information contained in the Information Disclosure Statement was cited in a unication from a foreign patent office in a counterpart application and this communication of received by any individual designated in § 1.56(c) more than thirty days prior to the of the Information Disclosure Statement.						
[X]	Enclos	sed herewith is form PTO-1449:						
	[X]	Copies of the cited references are enclosed.						
	[]	Copies of cited references are enclosed except those entered in prior application, U.S. Application No. [] to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]						
	[]	The listed references were cited in the enclosed International Search Report in a counterpart foreign application.						
	[]	The "concise explanation" requirement (non-English references) for reference(s) [under 37 CFR 1.98(a)(3) is satisfied by:						
		[] the explanation provided on the attached sheet.						
		[] the explanation provided in the Specification.						
		[] submission of the enclosed International Search Report.						
		[] the enclosed English language abstract.						

[X]	Applicant requests that the following pending application be considered:								
Examiner's Initials	U.S. Patent Application No. 09/770,771 by Viggó T. Marteinsson <i>et al.</i> , filed January 26, 2001, Docket No.: 2739.2004-000								
		Examiner Date							
	[X]	A copy of the above-cited application, including the current claims, is enclosed.							
	[]	A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.							
The Ex	kaminer ices wei	is requested to return a copy of the above list of pending applications indicating which e considered with the next office communication.							
It is red	quested	that the information disclosed herein be made of record in this application.							
Metho	d of pay	ment:							
[]	A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.								
[]	Please	ease charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is closed.							
[X]	Please	charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.							
		Respectfully submitted,							
		HAMILTON, BROOK, SMITH & REYNOLDS, P.C.							
		By Llel, Camill Alice O. Carroll Registration No.: 33,542 Telephone: (781) 861-6240 Facsimile: (781) 861-9540							
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Lexington, Massachusetts 02421-4799 Dated: June 11, 2001

PTO-1449 REPRODUCED				ATTORNEY DOCKET NO. 2739.2004-001	APPLICATION NO. CIP of Iceland No. 5863				
INFORMATION DISCLOSURE CITATION IN AN APPLICATION			APPLICANT Arnthor Aearsson, et al.			23 PTO 1			
	June 11, 2001			FILING DATE	GROUP		- 38 E		
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			U.S.	PATENT DOCUMENTS					
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE		
	AA	6,001,574	12/14/99	Short et al.	435	6			
	АВ	5,763,239	6/9/98	Short et al.	435	172			
		OTHER DOCUMENTS	(Including Au	thor, Title, Date, Pertinent	: Pages,	Etc.)			
	AR	one gene specifi	ic primer fo	opment of an amplificat or isolation of $lpha$ -amyla Institute of Technolog	ase gene	es dire	ctly form		
	AS	progressive mul position-specifi	Thompson, J.D., et al., "CLUSTAL W: improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice," Nucl. Acids Research 22(22):4673-4680 (1994).						
	AT	Woo, SS., et al., "Construction and characterization of a bacterial artificial chromosome library of Sorghum bicolor," Nucl. Acids Research 22(22):4922-4931 (1994).							
:	AU	Buckling, A., et al., "Disturbance and diversity in experimental microcosms," Nature 408: 961-964 (2000).							
	AV	Bateman, A., et al., "Pfam 3.1: 1313 multiple alignments and profile HMMs match the majority of proteins," Nucl. Acids Research 27(1):260-262 (1999).							
	AW	Connell, J.H., "Diversity in Tropical Rain Forests and Coral Reefs," Science 199:1302-1309 (1978).							
	AX	Rose, T.M., et al., "Consensus-degenerate hybrid oligonucleotide primers for amplification of distantly related sequences," Nucl. Acids Research 26(7):1628-1635 (1998).							
	AY	Takehiko, Y., "Enzyme Chemistry and Molecular Biology of Amylases and Related Enzymes," The Amylase Research Society of Japan, eds. (Boca Raton, Ann Arbor, London Tokyo: CRC Press) pp. 83-99 (1994).							
	AZ	Fry, J.C., "Oligotrophs," In <i>Microbiology of extreme environments</i> , C. Edwards eds., (Milton Keyes: Open University Press) pp. 94-116 (1990).							
	AR2	Santegoeds, C.M., et al., "Denaturing Gradient Gel Electrophoresis Used To Monitor the Enrichment Culture of Aerobic Chemoogranotrophic Bacteria from a Hot Spring Cyanobacterial Mat," Applied and Environmental Microbiology 62(11):3922-3928(1996).							
	AS2			"In situ Enrichment of m. Appl. Microbiol. 14:					
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			FORRIG	N PATENT DOCUMENTS						
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO			
		OTHER DOCUMENTS	(Including Au	thor, Title, Date, Pertinent	: Pages, :	Etc.)				
	AT2	Rondon, M.R., et al., "Toward functional genomics in bacteria: Analysis of gene expression in Escherichia coli from a bacterial artificial chromosome library of Bacillus cereus," Proc. Natl. Acad. Sci. USA 96:6451-6455 (1999).								
	AU2	Rondon, M.R., et al., "Cloning the Soil Metagenome: a Strategy for Accessing the Genetic and Functional Diversity of Uncultured Microorganisms," Applied and Environmental Microbiology, 66(6):2541-2547 (2000).								
	AV2	Reysenbach, AL., et al., "Differential Amplification of rRNA Genes by Polymerase Chain Reaction," Applied and Environmental Microbiology, 58(10):3417-3418 (1992).								
	AW2	Reysenbach, AL., et al., "Phylogenetic Analysis of the Hyperthermophilic Pink Filament Community in Octopus Spring, Yellowstone National Park," Applied and Environmental Microbiology, 60(6):2113-2119 (1994).								
	AX2	Morris, D.D., et al., "Correction of the β -Mannanase Domain of the celC Pseudogene from Caldocellulosiruptor saccharolyticus and Activity of the Gene Product on Kraft Pulp," Applied and Environmental Microbiology, 61(6):2262-2269 (1995).								
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	AZ2	Großkopf, R., et al., "Diversity and Structure of the Methanogenic Community in Anoxic Rice Paddy Soil Microcosms as Examined by Cultivation and Direct 16S rRNA Gene Sequence Retrieval," Applied and Environmental Microbiology, 64(3):960-969 (1998).								
	AR3	Skirnisdottir, S., et al., "Influence of Sulfide and Temperature on Species Composition and Community Structure of Hot Spring Microbial Mats," Applied and Environmental Microbiology, 66(7):2835-2841 (2000).								
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EXAMINER				DATE CONSIDERED						

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			Applicant Arnthor Aearsson, et al.						
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			FOREIG	N PATENT DOCUMENTS	•				
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO		
		OTHER DOCUMENTS	(Including Au	thor, Title, Date, Pertinent	Pages,	Etc.)			
	AT3	Fridjonsson, O., et al., "The structure of the α-galactosidase gene loci in Thermus brockianus ITI360 and Thermus thermophilus TH125," Extremophiles 4:23-33 (2000).							
	AU3	DeLong, E.F., "Archaea in coasal marine environments," Proc. Natl. Acad. Sci. USA 89:5685-5689 (1992).							
	AV3	Barns, S.M., et al., "Remarkable archael diversity detected in a Yellowstone National Park hot spring environment," Proc. Natl. Acad. Sci. USA 91:1609-1613 (1994).							
	AW3	Amann, R.I., "Phylogenetic Identification and In Situ Detection of Individual Microbial Cells without Cultivation," <i>Microbiological Reviews</i> 59(1):143-169 (1995).							
	AX3	Reysenbach, AL., "Microbial diversity at 83°C in Calcite Springs, Yellowstone National Park: another environment where the Aquificales and "Korarchaeota" coexist," Extremophiles 4:61-67 (2000).							
	AY3	Stainthorpe, A.C. and Williams, R.A.D., "Isolation and Properties of Clostridium thermocellum from Icelandic Hot Springs," International Journal of Systematic Bacteriology 38(1):119-121 (1988).							
	AZ3	Roszak, D.B. and Colwell, R.R., "Survival Strategies of Bacteria in the Natural Environment, "Microbiological Reviews 51(3):365-379 (1987).							
	AR4	Huber, R., et al., "Thermocrinis ruber gen. nov., sp. nov., a Pink-Filament-Forming Hyperthermophilic Bacterium Isolated from Yellowstone National Park," Applied and Environmental Microbiology, 64(10):3576-3583 (1998).							
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